Minuartia nuttallii (Pax) Briq. ssp. fragilis (Maguire & A. Holmgren) McNeill brittle sandwort Caryophyllaceae (Pink Family)

Status: State Threatened

Rank: G5T4S1

General Description: Adapted from Hickman (1993): A perennial matforming plant that is $\frac{3}{4}$ to $7\frac{3}{4}$ in. (2 to 20 cm), more or less green, and densely glandular-hairy. The taproot is greater than 1/8 in. (3 mm) in diameter. The rhizomes and trailing stems are less than $23\frac{1}{2}$ in. (60 cm). The stems in flowering are ascending to erect. The leaves are 1/8 to $\frac{1}{2}$ in. (4 to 15 mm) long, 1/128 to 1/32 in. ($\frac{1}{4}$ to 1 mm) wide, needle-like to awl-shaped, prominently recurved, and more or less rigid and evenly spaced. The axillary leaves are well developed. The sepals are 1/8 to $\frac{1}{4}$ in. ($3\frac{1}{2}$ to 7 mm), acute to acuminate, the margin is not curved inward or upward, and there are 3 ribs. The petals are $\frac{3}{4}$ to $1\frac{1}{2}$ times the size of the sepals. The reddish brown to dark brown seeds are 1/16 in. ($1\frac{1}{2}$ to $2\frac{1}{4}$ mm) and have thick margins.

Identification Tips: Minuartia nuttallii ssp. fragilis can be distinguished from ssp. gracilis and ssp. gregaria by their leaves and sepals. The leaves of ssp. fragilis are recurved and its sepals are 3-ribbed. The leaves of ssp. gracilis and ssp. gregaria are straight or slightly recurved, its sepals are 1- or 3-ribbed, and the lateral pair is less prominent. Minuartia nuttallii is most closely related to Minuartia decumbens. These two species can be distinguished by the nature of the plant. Minuartia nuttallii is densely glandular-hairy, whereas Minuartia decumbens is hairless or sparsely glandular-hairy (especially in the inflorescence).

Phenology: Identifiable May through August.

Range: This taxon is found in Washington, Oregon, California and Nevada. In Washington, it has been seen in Grant County.

Habitat: *Minuartia nuttallii var. fragilis* grows mostly on open, gravelly benches or limestone talus from open sagebrush hills to alpine slopes at an elevation of 5413 to 7874 ft. (1650 to 2400 m). In Washington, this taxon has been found in desert ridges (raised basalt) in rocky to gravelly or sandy soil.

Ecology: This taxon prefers dry rocky areas at medium elevations.

Minuartia nuttallii ssp. fragilis

brittle sandwort



Known distribution of Minuartia nuttallii var. fragilis in Washington



• Current (1980+)

O Historic (older than 1980)

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State Status Comments: The taxon is known from one recent occurrence in Grant County. Very little information is known about this population.

Inventory Needs: Desert ridges in Grant County should be systematically surveyed for additional populations.

Threats and Management Concerns: Off-road vehicles are the primary threat to this species.

Comments: Hitchcock et al. (1964) refers to this species as *Arenaria* nuttallii var. fragilis.

References:

Hickman, J.C. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley. 1400 pp.

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1964. Vascular Plants of the Pacific Northwest Part 2: Salicaceae to Saxifragaceae. University of Washington Press, Seattle, WA. 597 pp.

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